

### REMARKS

Claims 1 and 6-18 are pending in the application. Claims 1, 8, and 11 have been amended. Claims 17 and 18 have been added. Support for the amendments and added claims may be found in the Specification as originally filed and no new matter has been added. Applicants acknowledge the Examiner's finding of allowable subject matter in Claim 12.

### REJECTIONS UNDER 35 USC 102(e)

Claims 1, 6, 11, 13-16 stand rejected under 35 USC 102(e) as being anticipated by Trull et al. US 5,947,929 (hereinafter "Trull").

The Office Action alleges that Claims 1 and 8, Trull teaches a syringe (210), a body (212), a plunger (220) in an injector (250) with a housing (250), and a piston (240/rod 254), with a collet (and elastomeric) member (238) which releasably grasps and retracts the plunger (220) (Fig. 13).

The Office Action also alleges that claim 11, Trull teaches a syringe (210), a body (212), a plunger (254) in an injector (250) with a housing (250), and a piston (240) with a sleeve member (242) and one or more plunger gripper members (232, 234) which are adapted to be biased by the sleeve member into engagement with the plunger upon retraction of the piston. Fig 13. Regarding claims 6, 7, 9, 10, 13-15, the piston is adapted to drive and engage the plunger without regard to the orientation of the plunger with respect to the piston. As to claim 16, since the volume of the elastomeric member does not change, it inherently must compress axially in order to expand radially.

Regarding Claim 1, Claim 1 has been amended to include that "the piston comprises a forward end and an elastomeric member [is] disposed at the forward end of the piston and [is] adapted to expand in a radial direction to connectively engage the plunger to retract the plunger within the syringe." Support can be found in the specification as originally filed, including at page 29, para 4, lines 2-3. This novel feature allows the elastomeric member to be axially forward of the piston. Whereas, Trull discloses that "the driving head 240 has an outer surface of frustoconical shape as shown, presenting an outer surface 242 which is slideably engagable against the

interior wall surface 244..." (Col. 10, lines 30-33). Further the projections 236, 238 are merely part of the driving head 240 (Col. 10, lines 27-28). Thus, Trull discloses that the pistons includes the projections, and therefore a does not disclose an elastomeric member disposed axial forward of the piston of Applicants' invention. Accordingly, Trull does not anticipate Applicants' invention of Claim 1.

Regarding Claim 8, Claim 8 has been amended to include that the piston has a forward end, and "the piston comprises a collect member disposed at the forward end." Support can be found in the specification as originally filed, including at page 29, para 4, lines 2-3. This novel feature allows the elastomeric member to be axially forward of the piston. Whereas, as similarly discussed above with regard to Claim 1, Trull discloses that "the driving head 240 has an outer surface of frustoconical shape as shown, presenting an outer surface 242 which is slideably engagable against the interior wall surface 244..." (Col. 10, lines 30-33). Further the projections 236, 238 are merely part of the driving head 240 (Col. 10, lines 27-28). Thus, Trull discloses that the pistons includes the projections, and therefore a does not disclose an collet member disposed axial forward of the piston as included in Applicants' invention.

Further, Claim 8 also is directed to the collet member disposed on the forward end of the piston and "the collet member comprises one or more segment members adapted to outwardly deflect inside the plunger in a radial direction to engage the plunger when the piston is retracted." These structural features are very novel as compared to Trull. In fact Trull discloses a structure that is the very different than Applicants' invention.

In Fig. 13 Trull discloses that:

The driving head 240 is drivable in either of the forward or rearward directions, as indicated by bidirectional arrow A. The translation of the driving head by the reciprocateable drive shaft 254 causes the engagement elements 232 and 234 to be deflected in the directions of movement indicated by bidirectional arrows B and C, with the resilient elements being translated radially outwardly by forward movement of the driving head, and radially inwardly by retracting movement of the driving head, as a result of the tapered configuration of the wall surface 244 and the driving head 242 surface.

In operation, the angiographic syringe is positioned as shown, and forward movement of the drive shaft 254 and corresponding advancement of the driving head 240 causes the resilient elements 233 and 234 to move radially outwardly

to engage with the matable surfaces 228 and 230, so that the driving head projections bear compressively outwardly against the projection elements of the plunger, to engage the driving head and plunger.

Conversely, when the plunger is retracted by the driving head, and the driving head enters the cavity bounded by conical wall surface 244, the retraction will cause the retention elements 232 and 234 to radially inwardly translate and to disengage from the engagement surfaces of the projections on the plunger. (Col. 10, lines 40-65).

Thus, Trull discloses a driving head that is designed completely differently than Applicants' invention. In fact, Trull's structure is completely opposite of Applicants' invention because in Trull **retraction of the driving head causes retention elements to radially inwardly translate and to disengage from the engagement surfaces** of the plunger, but during the forward movement of the driving head causes retention elements to outwardly translate and to engage. Accordingly, Trull does not anticipate Applicant's invention of Claim 8.

Regarding Claim 16, the Office Action alleges that "since the volume of the elastomeric member does not change, it inherently must compress axially in order to expand radially." However, Trull discloses at para 10, lines 52-65 that the resilient elements 233 and 234 merely to translate to move radially outward or radially inward. Thus, there is no axial compression of elements 233, 234. Accordingly, Trull does not anticipate Claim 16 of Applicants' invention.

Further, regarding Claim 13-16, Claim 13-16 are not disclosed by Trull. Further Claims 13-16 depend from Claims 1, 8 or 11, which as discussed are believed to be allowable. Thus, Claims 1, 8 and 11 are also believed to be allowable.

#### NEW CLAIMS

Claims 17 and 18 have been added and depend from Claims 1 and 8, respectively. Claims 17 and 18 are directed to the elastomeric member (or collet member) expanding from an unstressed condition. Trull does not disclose the inventions of Claims 17 and 18 and are therefore believed to be allowable.

In view of the above amendments and remarks, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them.

Respectfully submitted,

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